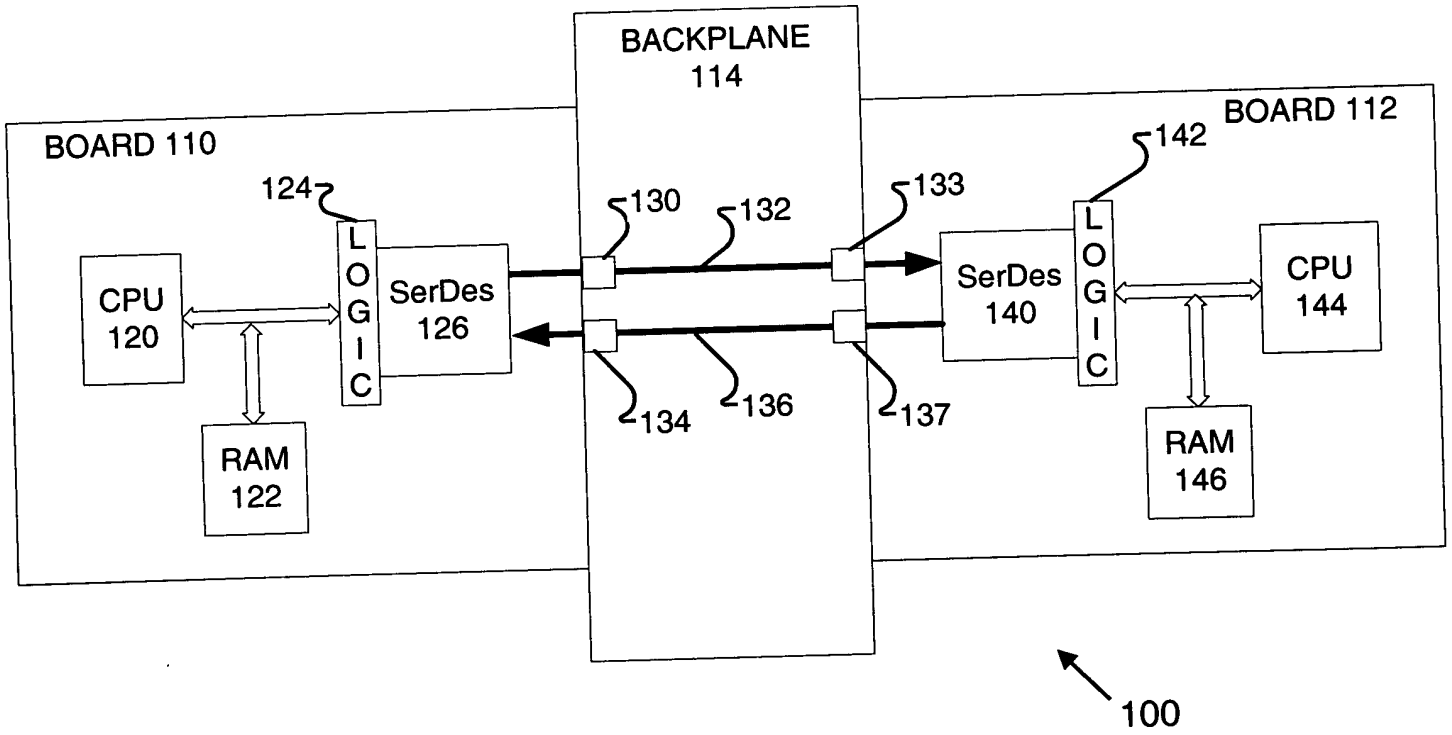

FIG. 1
(PRIOR ART)

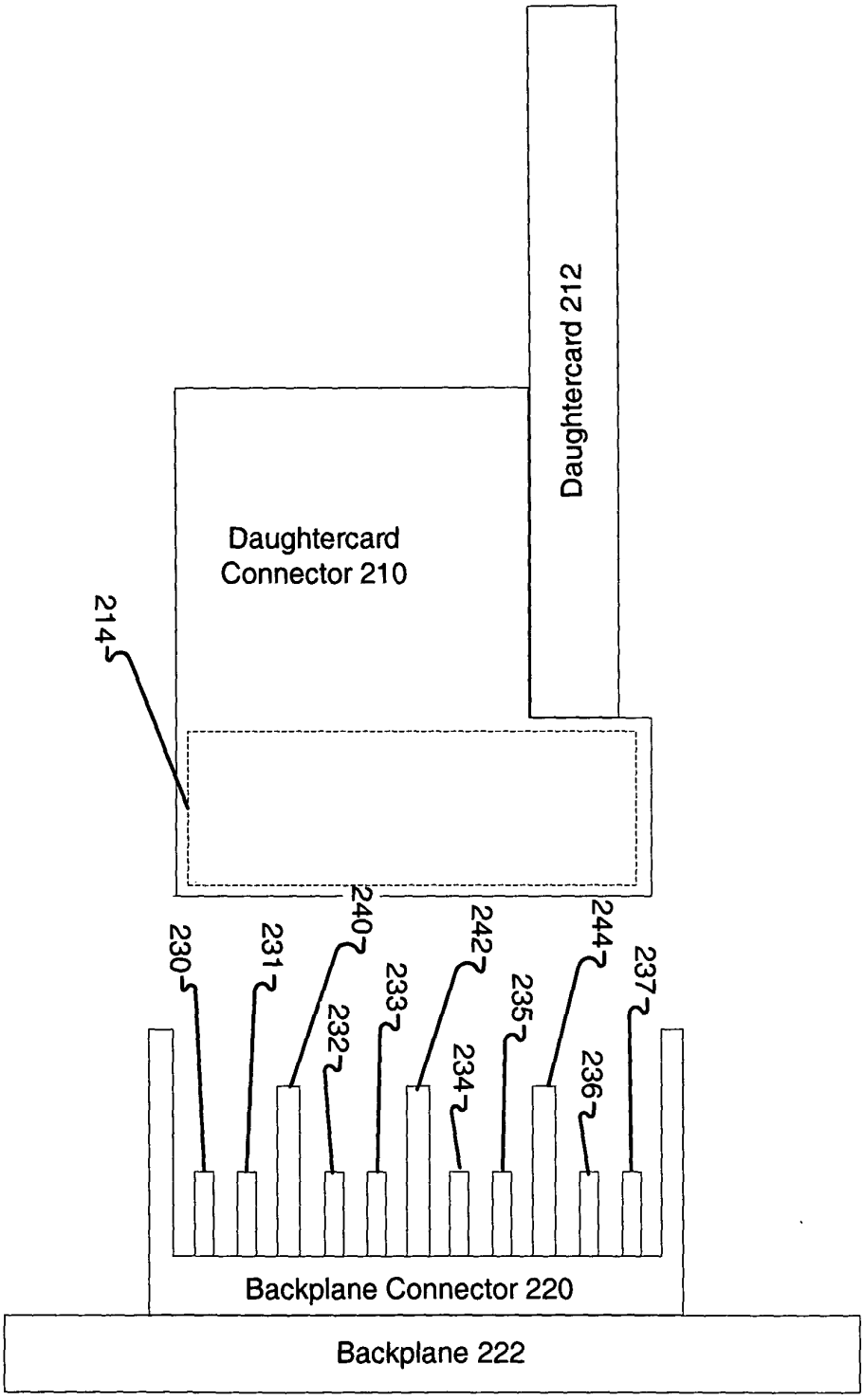

FIG. 2
(PRIOR ART)

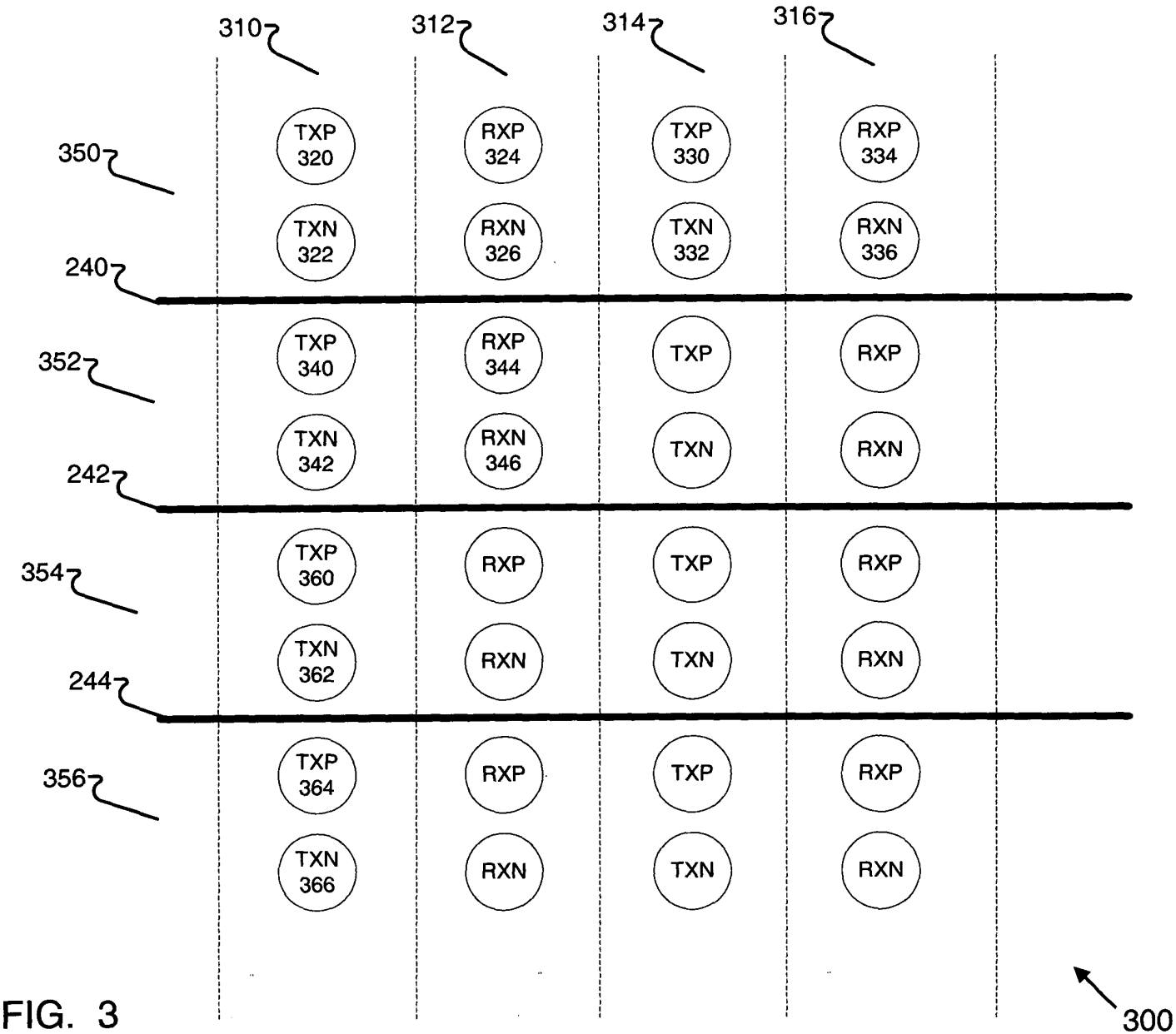

FIG. 3
(PRIOR ART)

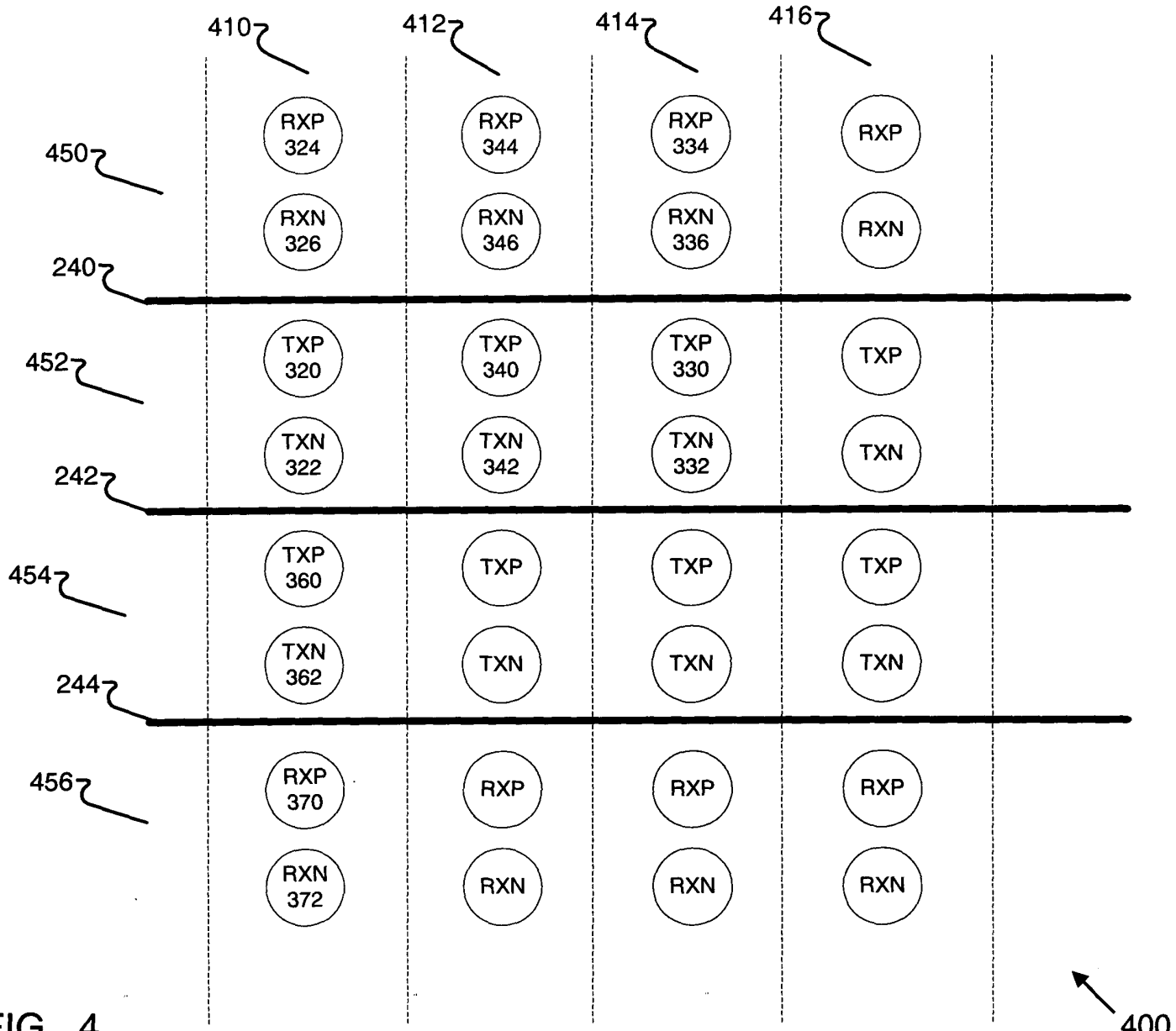
410
412
414
416
450
RXP 324
RXP 344
RXP 334
RXP
RXN 326
RXN 346
RXN 336
RXN
240
452
TXP 320
TXP 340
TXP 330
TXP
TXN 322
TXN 342
TXN 332
TXN
242
454
TXP 360
TXP
TXP
TXP
TXN 362
TXN
TXN
TXN
244
456
RXP 370
RXP
RXP
RXP
RXN 372
RXN
RXN
RXN
400

FIG. 4

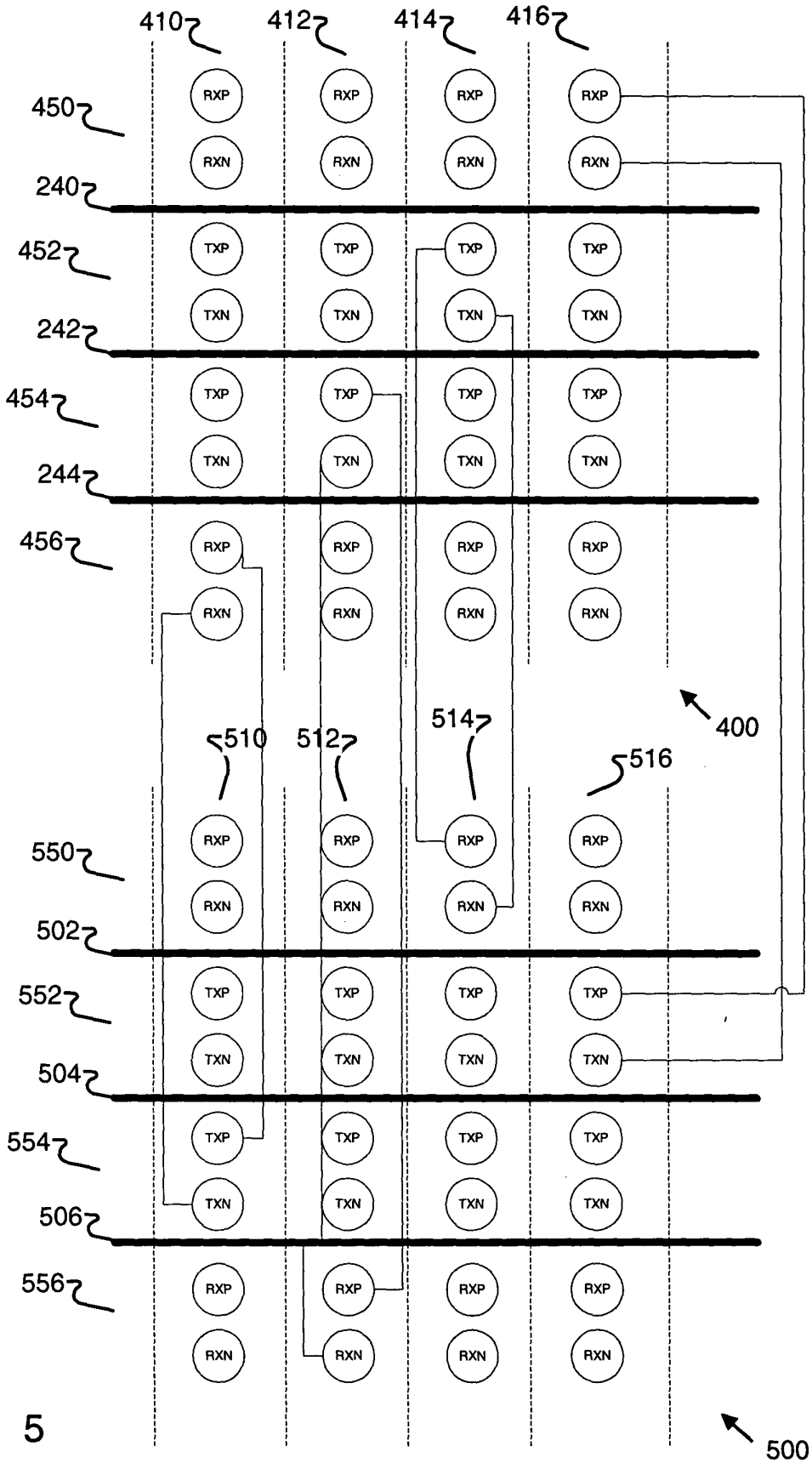
410
412
414
416
450
240
452
242
454
244
456
510
512
514
516
400
550
502
552
504
554
506
556
500
RXP
RXN
TXP
TXN

FIG. 5

Name	Valu	Comment
Materials	Rogers 4350 FR4 Nelco 4000	
Dimensions	Length = 23.5" Width = 12" Thickness ~ 250mil	
Connector	GbX	
Troughs	Star Configuration Mesh Configuration Test Structures	3 Total
Link length	3, 6, 9, 12, 15, 18 4.5, 7.5, 10.5, 13.5, 16.5, 19.5	Switch Card1, Mesh Switch Card2
Connector size	25 column 10 column	
Connector space	Populated: 3" Footprints: 1.5"	1.5" between switch card connectors
Total # of layers	22 (8 signal, 10 ground, 2 power)	Microstrip (top/bottom)
Routing layers	3, 5, 7, 9, 14, 16, 18, 20	
Vias	Backdrilled to 5 for signals on 3 & 5 Backdrilled to 9 for signals on 7 & 9 Backdrilled to 16 for signals on 14 & 16 PTH for signals on 18 & 20	
Antipad clearance		Elliptical
Trace width	8mil	Differential stripline
Spacing	8mil	
Dielectric thickness	Rogers: 10mil FR4: Nelco:	Assume 1/2oz copper

FIG. 6

Layer # (from top)	Value
1	Top
2	Ground
3	Signal
4	Ground
5	Signal
6	Ground
7	Signal
8	Ground
9	Signal
10	Ground
11	Power
12	Power
13	Ground
14	Signal
15	Ground
16	Signal
17	Ground
18	Signal
19	Ground
20	Signal
21	Ground
22	Bottom

FIG. 7